

# Japan

## National progress report on the implementation of the Hyogo Framework for Action

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Reporting period : 2007-2009

Last updated on : 4 June 2009

Print date : 11 Jun 2009

Reporting language : English

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An HFA Monitor update published by PreventionWeb

<http://www.preventionweb.net/english/countries/asia/jpn/>



## Strategic goals 1

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### Area 1

*The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.*

#### **Strategic Goal Statement:**

Thorough and comprehensive disaster prevention, mitigation and preparedness and vulnerability reduction will be achieved through building of disaster-resilient national and urban structures, preparedness for smooth disaster response and recovery, national movement for disaster reduction and research and hazard monitoring that contribute to reducing disaster risks (The Basic Disaster Prevention Plan).

### Area 2

*The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.*

#### **Strategic Goal Statement:**

Impact of disasters will be reduced through the best and cooperative efforts by the national government, public corporations, local governments, enterprises and citizens in every phases of disaster. In particular, citizen participation on disaster reduction activities will be promoted by education and knowledge-sharing, drills and exercises, strengthening of local voluntary disaster management organizations, establishment of the enabling environment for volunteers, and promotion of disaster reduction by private enterprises (The Basic Disaster Prevention Plan).

### Area 3

*The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.*

#### **Strategic Goal Statement:**

Impact of disasters will be reduced at all the phases of disaster prevention, response and recovery, thorough and comprehensive disaster prevention, mitigation and preparedness measures, quick and smooth disaster response operations, and effective and uninterrupted disaster recovery and rehabilitation programmes (The Basic Disaster Prevention Plan).

## Priority for action 1

*Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.*

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### Core indicator 1

*National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.*

**Level of Progress achieved:**

5: Comprehensive achievement with sustained commitment and capacities at all levels

**Description:**

The cornerstone of legislation on disaster risk reduction is the Basic Act on Disaster Control Measures, enacted in 1961, which set out the basis for measures to reduce disaster risk in Japan. The Basic Act clearly defines the responsibilities in disaster risk reduction of national government, local governments, public bodies as well as legal bodies carrying on public business designated by the Prime Minister, and residents. Under the Act, even in the private sector, persons with responsibilities regarding disaster risk reduction must fulfill their responsibilities faithfully, and local residents, besides taking measures to prepare for disasters, must also make efforts to contribute to disaster risk reduction by, for example, participating in voluntary disaster risk reduction activities.

Under the Act, the Basic Disaster Prevention Plan has been drafted at each level, setting out comprehensive and long-term plans for disaster risk reduction in Japan: based on this Plan, a comprehensive disaster-management planning system has been established.

Further, the lessons learned from the Great Hanshin-Awaji Earthquake of 1995 prompted enhancements to Japan's disaster risk reduction legislation and government policy. The Basic Act was amended to ensure more effective and prompt measures taken at each level of actors. Especially, the Basic Act explicitly states that national and local public bodies must endeavor to foster voluntary organization for disaster prevention, and provide an environment conducive to the performance of voluntary disaster risk reduction activities.

The Basic Disaster Prevention Plan has been reviewed annually and amended as needed. In a recent review in February 2008, the Basic Plan was revised based on the lessons learned in the recent disasters and the deliberation in the Central Council including the view points of necessity to take follow-up measures of priority issues and to facilitate nationwide movement for disaster reduction. The relevant laws have been also regularly updated and improved. For example, the Act on Support for Livelihood Recovery of Disaster Victims was amended in 2007 to deregulate the limitation of the use of the support fund.

**Context & Constraints:**

N.A.

**Core indicator 2**

*Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

The Basic Act on Disaster Control Measures clearly specifies responsibilities of organizations involved in disaster risk reduction. The Basic Act stipulates the basic principles of taking budgetary steps by the organizations responsible for the implementation of disaster preparedness and response measures defined in the Act.

In the fiscal year 2008, the national budget for disaster management was approximately 2.1 trillion yen. The budget was allocated to the fields of i) scientific technology research (9 billion yen); ii) disaster prevention and preparedness (0.7 trillion yen); iii) national land conservation (1.2 trillion yen); and iv) disaster recovery and rehabilitation (0.2 trillion yen).

At the Prefectural level, for example, Hyogo Prefectural government allocated 1.3 billion yen in the fiscal year 2008 for i) formulation of the regional disaster management plan, ii) improvement of safety

measures for social infrastructure and buildings, iii) promotion of protection by mutual aid system for housing reconstruction, iv) dissemination of lessons learnt from the Great Hanshin-Awaji Earthquake, and v) improvement of disaster management system.

Similarly, at the City level, for example, Kobe Municipal government earmarked the budget for disaster management activities including i) establishment of emergency response center, ii) promotion of renovation for earthquake-resistant structures of buildings, iii) improvement of public infrastructure, and iv) flood and storm surge countermeasures.

#### **Context & Constraints:**

Due to financial crisis, many local governments have faced to difficulty to allocate enough amount of budget for taking sufficient measures, and have no other choices to maintain minimum requirement.

### **Core indicator 3**

*Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels*

#### **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

#### **Description:**

The Basic Act on Disaster Control Measures stipulates the responsibility of municipal authorities to organize fire service organization including volunteer fire corps and to promote formation of voluntary disaster management organization. The volunteer fire corps members are public employees in special service, and paid remunerations for their work and efforts in case of disasters based on the ordinance in each municipality although the participation in the corps is basically based on volunteer spirit. Meanwhile, the voluntary disaster management organization is established voluntarily guided by a sense of solidarity in a community. In order to promote the activity of the organizations, some municipalities provide subsidy for the activities, conduct training for disaster risk management, and publish guidelines for community activities.

The national government has designated January 17th of each year as Disaster Reduction and Volunteer Day and January 15th to 21st of each year as Disaster Reduction and Volunteer Week. The designation of the day and week generates more opportunities to share information among volunteer groups and relevant entities and provide useful information to improve the environment for disaster reduction volunteer activities.

To promote a nationwide movement where individuals, families, communities, corporations and other various groups and entities participate in continuous activities and investments for mitigating disaster damage, the Central Disaster Management Council published the “Basic Framework for Promoting a Nationwide Movement for Disaster Reduction - Actions with Added Value to Security and Safety” in 2006. The framework places a particular emphasis on i) involvement of various local groups, ii) development of more attractive educational tool to understand proper knowledge on disaster reduction, iii) promotion of investment for safety in corporate sectors and households, iv) facilitating networking of various stakeholders, and v) sustainable disaster reduction activities by each individual and each sector of society.

The Cabinet Office and the relevant organizations have regularly organized the events to encourage the community participation in disaster reduction activities, such as Disaster Reduction and Volunteer Meeting, Review Meeting for Volunteer Activities for Disaster Reduction, Disaster Reduction Fair, and “Community Development Forum. More than 10 such events have been conducted since 2007.

#### **Context & Constraints:**

Change in social structure, living environment and lifestyles on a nationwide scale in recent years have

led to increase of numbers of elderly people who are living alone as well as sparsely-settled areas mainly consist of aging population, which make difficult mutual support among residents including setting up community organizations. Based on the “Guidelines for Evacuation Support of People Requiring Assistance During a Disaster” in 2005 (revised in 2006), measures to provide necessary assistance to those such as the elderly and physically impaired at the time of a disaster need to be reinforced.

## **Core indicator 4**

*A national multi sectoral platform for disaster risk reduction is functioning.*

### **Level of Progress achieved:**

5: Comprehensive achievement with sustained commitment and capacities at all levels

### **Description:**

Under the Basic Act on Disaster Control Measures, the Central Disaster Management Council was formed, its brief being to ensure the comprehensiveness of disaster risk management and to discuss matters of importance with regard to disaster management. The Council consists of the Prime Minister, who is the chairperson, Minister of State for Disaster Management, all ministers, heads of major public institutions and academic experts such as heads of local governments. The Council was designated as one of four Councils on key policy fields of the Cabinet Office in the Central Government Reform of Japan in 2001. The duties of the Council are: i) formulation and promotion of implementation of the Basic Disaster Prevention Plan and Earthquake Countermeasures Plans; ii) Formulation and promotion of implementation of the urgent measures plan for major disasters; iii) Deliberating important issues on disaster reduction according to requests from the Prime Minister or Minister of State for Disaster Management (basic disaster management policies, overall coordination of disaster countermeasures and declaration of state of disaster emergency), and iv) Offering opinions regarding important issues on disaster reduction to the Prime Minister and Minister of State for Disaster Management. After the Central Government Reform of Japan in 2001, 23 councils (three times in a year on average) were held with the participation of the Prime Minister by the end of December 2008. The council meetings were organized 6 times after 2007, and discussed the agenda such as countermeasures for the Tokyo Inland Earthquake, and Business Continuity Plan (BCP) of Central Government Ministries and Agencies.

### **Context & Constraints:**

N.A.

## **Priority for action 2**

*Identify, assess and monitor disaster risks and enhance early warning*

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## **Core indicator 1**

*National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.*

### **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

### **Description:**

Japan has carried out hazard mapping with regard to tsunamis, tidal waves, flooding, landslides, volcanic eruptions and earthquakes. Progress has also been made in the development of dynamic flood

hazard maps which predict how the flooding will spread over time. The scale of these maps varies from 1/2,500 to 1/25,000 according to purpose. Many hazard maps have been drafted by local public bodies: the Cabinet Office, the Ministry of Agriculture, Forestry and Fisheries of Japan, the Fisheries Agency, the Ministry of Land, Infrastructure and Transport and other agencies have drawn up manuals on the subject. In addition, the 2005 revised version of the Flood Fighting Act, for example, obligates municipalities containing zones expected to be inundated as announced by the MLIT to compile a flooding hazard map and to distribute copies of it to each household. A total of 493 municipalities throughout Japan have so far published and distributed their hazard maps in print or other means as of July 2007. Many of the developed maps have been made available to the general public on the internet and elsewhere. In April 2007, Ministry of Land, Infrastructure and Transport launched portal site which allows users to search and view various hazard maps compiled by municipalities on the Internet. In addition, based on the study by the Committees for Technical Investigation under the Central Disaster Management Council, the government has published assessment of damages and countermeasures in case of possible large-scale disasters including the Tonankai and Nankai Earthquakes, the Tokyo Inland Earthquakes, the Trench-type Earthquakes in the Vicinity of the Japan and Chishima Trenches, and large-scale flood in the Tokyo metropolitan area. For example, recently in November 2007, the result of the assessment of damages including infrastructure and human damages by the Inland Earthquake in the Chubu region and the Kinki region were made available to the public. Further, the Committee for Technical Investigation on Large-scale Flood countermeasures, which was established in 2006, published the estimation of inundation caused by overflow of the Arakawa River System in October 2007, and the assessment of damage by the surge of the Tokyo Bay in case of the occurrence of a large-scale flood disaster in March 2008.

**Context & Constraints:**

Some of the maps are not open to the general public. Further, promotion of proper understanding of public on importance of hazard maps and risk information shown on the maps are required.

**Core indicator 2**

*Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

The observation, analysis and dissemination systems are in place for data on climate-related hazard, earthquake and tsunami, volcanic eruption, and river-related hazard covering for all of Japan's national territory. They help to grasp the situation of the disaster early on and promote information sharing among relevant organizations, thereby enabling quick and appropriate decision-making for emergency response operations.

Further, the national government has been currently developing Disaster Information Sharing Platform, a common information sharing system with a standardized information format, where various disaster information provided by ministries and agencies, local governments, relevant organizations and residents, can be posted and freely accessed by all.

**Context & Constraints:**

Intensive use of urban space such as enhancement of underground space and increase of living areas below sea level, and high-rise buildings, brought us unprecedented vulnerabilities and risks. The aspects should be further understood by the public to take effective action.

**Core indicator 3**

*Early warning systems are in place for all major hazards, with outreach to communities.*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

All of Japan's national territory is covered by early warning systems for storms, torrential rains, heavy snow, sediment disasters, tsunamis, tidal waves, high surf, inundation and floods, the Ministry of Land, Infrastructure and Transport, the Japan Meteorological Agency and local government bodies being the main institutions involved. The organizations use 24-hour systems to carefully monitor various natural phenomena and weather conditions. Areas deemed to be at particularly high risk of earthquake or volcanic eruption are also covered by specific countermeasures.

The development of a quick and accurate communications system is essential for the effective use of early warning information. Online system linking disaster management organizations of the national and local governments and media organizations has been developed for the purpose. Radio communications networks exclusively for disasters have also set up for connecting national organizations, firefighting organizations, local governments, residents, and designated public corporations. Furthermore, as a backup, a satellite communications system has been constructed. Simultaneous wireless communications systems using outdoor loudspeakers and indoor radio receivers are used to disseminate disaster information to residents. Tsunami and severe weather warnings are widely provided to citizens via TV and radio broadcasts.

Further, Since 1 October 2007, the Earthquake Early Warning service has been started for provision through a number of media outlets such as TV and radio. The Earthquake Early Warning system was developed to provide advance announcement of the estimated seismic intensities and expected arrival time of principal motion based on prompt analysis of the focus and magnitude of the earthquake using wave form data observed by seismographs near the epicenter. The system allow countermeasures such as promptly slowing down trains, controlling elevators to avoid danger and enabling people to quickly protect themselves in various environments such as factories, offices, houses and near cliffs.

**Context & Constraints:**

Adverse affect of an overflow of information as highly-advanced information society could lead to excessive social anxiety. Delivering information in an easily comprehensible manner should be further considered as well as the system to disseminate precise information promptly.

**Core indicator 4**

*National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.*

**Level of Progress achieved:**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

**Description:**

Taking into account the lessons learned from bitter experience of the 1960 Chile tsunami formed by seismic activity far from Japan, the government has been making collaborative efforts with other relevant countries to establish an early warning system against tsunamis in the Pacific Ocean. Japan Meteorological Agency acts in coordination with the Pacific Tsunami Warning Center (PTWC) in Hawaii and issues a long-propagating tsunami warning. JMA operates the Northwest Pacific Tsunami Advisory Center, which provides more tailored tsunami information for countries in the Northwest Pacific region in cooperation with PTWC.

**Context & Constraints:**

Global warming alert average weather conditions on a global scale, bringing negative impacts including growing potential risks of natural disasters resulting from the frequent occurrence of fierce natural events. To reduce risks from natural disasters by climate and environmental change due to development activities, fostering further efforts for taking mitigation measures in collaboration with all sectors of international society is required.

Further, globalization and rapid spreading out of the economic activities by corporations tend to trigger a regional or global chain reaction of economic damages caused by a disaster in a place. Risk assessment taking into consideration of the chain reaction of the adverse impact should be further considered.

## Priority for action 3

*Use knowledge, innovation and education to build a culture of safety and resilience at all levels*

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### Core indicator 1

*Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)*

**Level of Progress achieved:**

5: Comprehensive achievement with sustained commitment and capacities at all levels

**Description:**

White Paper on Disaster Prevention (Annual Governmental Report on Disaster Prevention) has been prepared based on the provision of the Basic Act on Disaster Control Measures and submitted to National Diet. The Report includes information on recent disaster situation in Japan, current progress of countermeasures for disasters, and future plan for improving disaster management system which is collected from all the relevant ministries and agencies. The Report is open to the public on the Internet and also available as publication. Further, as mentioned in the section of priority action 2, Disaster Information Sharing Platform, a common information sharing system with a standardized information format for various disaster information provided by various stakeholders has been developing to be posted and freely accessed by all.

Local governments, especially the prefectures, cities and towns located in disaster prone areas, provide information on disaster risks in the areas and tips to how to protect themselves from the risks by various medium including internet and publications as well as conducting workshops targeting residents.

Information for kids is also provided by many of local governments to be learned with pleasure. In addition, museums or learning centers where residents including students and kids can interactively learn disasters and disaster risk management have been set up by some local governments.

Further, the utilization of the broadcasting system is effective for conveying disaster information to the public. Accordingly, the national and local governments have made agreements with the Japan Broadcasting Corporation and private broadcasters to cover relevant information on disaster risk by replacing the regular program or running on a telop at the time of looming or occurrence of disaster. Recently, in the light of the situation that the disasters caused by wind gust including tornado has frequently occurred, a review committee was established among relevant organizations. The committee published the result of the review of countermeasures in June 2007, and developed the brochure to introduce the characteristics of wind gust disasters and how to protect oneself in case of encountering tornado at a time.

**Context & Constraints:**

N.A.

## Core indicator 2

*School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.*

### **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

### **Description:**

With a view to improving disaster risk reduction education at school, the Ministry of Education, Culture, Sports, Science and Technology is implementing policies such as providing teachers with reference material to be used in safety guidance and planning evacuation drills, developing and distributing disaster risk reduction training materials focusing on how to prepare for and behave in the event of an earthquake or other natural disaster, and holding disaster risk reduction education training sessions. Cabinet Office and Ministry of Land, Infrastructure and Transport also has been making efforts to enhance disaster reduction education such as operating the websites dedicated to disaster reduction education, distributing educational materials, and conducting lectures on demand which the staff of the ministries directly visit and have talks with residents and students. Fire and Disaster Management Agency has been introducing the “disaster prevention & crisis management e-college” designed to provide people with opportunities to learn about disaster prevention and crisis management. It offers courses for general public, local government officials, fire brigade members, volunteer fire fighters, and kids. Further, systematic training on disaster risk management for officials responsible for disaster management in local governments has been regularly provided by the Disaster Reduction and Human Renovation Institution

To share and promote good practices and useful tools for disaster reduction education, a collaborative effort for providing subsidy to the selected educational plans which are designed and proposed as new initiatives by practitioners for enhancing disaster reduction education has been supported by various relevant organizations including Cabinet Office and Fire and Disaster Management Agency. The information of the activities conducted under the plans is also available on the internet for the reference to other practitioners.

In addition, the Ministry of Education, Culture, Sports, Science and Technology has recently made study on measures to support the efforts for disaster reduction education with the effective use of the result of the study of science and technology for disaster reduction. The Ministry has initiated a new program for supporting and promoting disaster reduction education since fiscal year 2008, and given assistance to the undertaking for enhancing disaster reduction education in the model areas.

### **Context & Constraints:**

Currently effective disaster reduction education at schools is mainly provided limited numbers of teachers with enthusiasm. It is required to develop more systematized programs as appropriate according to ages and areas as well as applicable to current official curriculum guidelines.

## Core indicator 3

*Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.*

### **Level of Progress achieved:**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

### **Description:**

Scientific Technology Research in Disaster Reduction has been steadily addressed based on the Basic

Plan for Research and Development in Disaster Reduction (revised in December 2003). On 6 March 2009, the 10-year policy for earthquake research “Towards Promotion of Innovative Research Study - the Comprehensive and Basic Policy on Promotion of Observation, Monitoring, Survey and Research on Earthquake-“ was compiled by the Headquarters of Promotion of Earthquake Research.

The Fire and Disaster Management Agency has drawn up a procedure enabling local public bodies to make an objective assessment of their own disaster risk reduction and crisis-management systems. National Research Institute for Earth Science and Disaster Prevention has studied the methods for multi-risk assessments in conjunction with the development of disaster information sharing system among various stakeholders in collaboration with local communities.

#### **Context & Constraints:**

In the meanwhile, efforts for development of research methods and tools for multi-risk assessments which reflect social and environmental change and cost benefit analysis are currently on going by several actors including governments and academia.

#### **Core indicator 4**

*Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.*

#### **Level of Progress achieved:**

5: Comprehensive achievement with sustained commitment and capacities at all levels

#### **Description:**

The national government has designated September 1st of each year as Disaster Reduction Day, and the period from August 30th to September 5th as Disaster Reduction Week. A variety of events such as the Disaster Reduction Fair, various seminars, disaster reduction drills and exercises, and disaster reduction poster contests are held throughout the country to disseminate disaster knowledge. These events are held by the central government, local government bodies, and other organizations (jointly, in some cases). In addition to publicity on TV, radio, in newspapers and leaflets, special features are presented by various press organizations. Schools participate by creating slogans and participating in disaster management poster contests and voluntary activities, among other things.

Further, as mentioned in the section of priority for action 1, the Central Disaster Management Council published the “Basic Framework for Promoting a Nationwide Movement for Disaster Reduction - Actions with Added Value to Security and Safety.” to promote a nationwide movement where individuals, families, communities, corporations and other various groups and entities participate in continuous activities and investments for mitigating disaster damage in 2006.

As mentioned in the above section, the Cabinet Office and the relevant organizations have regularly organized the events to encourage the community participation, such as Disaster Reduction and Volunteer Meeting, Review Meeting for Volunteer Activities for Disaster Reduction, Disaster Reduction Fair, and “Community Development Forum. More than 10 such events have been conducted since 2007.

#### **Context & Constraints:**

N.A.

### **Priority for action 4**

*Reduce the underlying risk factors*

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#### **Core indicator 1**

*Disaster risk reduction is an integral objective of environment related policies and plans, including for*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

Japan has National land conservation projects such as river improvement, soil erosion control (sabo), and soil and coastline conservation are carried out strategically for protecting national land, citizens' lives and property from various disasters. In 2005, the National Spatial Planning Act (revision of Comprehensive National Development Act) was enforced in order to make the shift from the policy centered on development. Based on the Act, the National Spatial Strategies was developed at national level in 2008 and have been currently under development at regional level. One of the strategic goals identified in the Act and the National Strategies are to design disaster resilience nation to ensure safe and secure life including promotion of comprehensive disaster risk reduction measures. Additionally, the "Forest Improvement and Conservation Works Master Plan (5-Year Plan)" was formulated in 2003 to promote comprehensive and effective forestry improvement and soil conservation projects.

**Context & Constraints:**

The task force to comprehensively review the current progress of adaptation to climate change in the national policies has established and just started the activities in March 2009. Disaster risk reduction is considered one of the important issues to be considered in the study.

**Core indicator 2**

*Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

It is required to promptly ensure earthquake resistance of all the school facilities, where school children spend most of their time and are used as evacuation places in case of disasters. However, the 40 percent of the buildings of public elementary and junior high schools have problems related to resistance to earthquakes and need to enhance earthquake safety. With this point in view, in 2006, the system has been changed to broaden the discretion of local governments in dealing with the expenditures. In addition, the national government formulated the plan that the local governments promote reinforcement of the public school buildings with high risks of being collapsed in case of large-scale disasters within around 5 year. Currently the efforts have been made to complete the implementation of the plan ahead of schedule.

To promote the countermeasures to support the evacuation of those who require assistance in case of emergency, a national plan was developed in December 2007. The Plan calls for development of evacuation support master plans by local governments with the view to smoothly proceed with collection and sharing of information of those who need assistance in each city, town, and village, and introduced the model plan formulated by the relevant organizations.

**Context & Constraints:**

Currently the implementation of the planned activities is in progress.

### Core indicator 3

*Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities*

#### **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

#### **Description:**

The Cabinet Office promotes the enhancement of disaster reduction activities of corporations including development of BCP (Business Continuity Plan) of Corporations. The "Business Continuity Guideline" to promote development of BCP for enterprises was developed in 2005. For better understanding and more use of the Guideline, a practical guide of the Guideline was published in March 2007. According to the survey result in 2008, 18.9 percent of the large-scale enterprises and 12.4 percent of medium-size enterprises have developed the BCP.

Further, the Development Bank of Japan launched a new lending mechanism disaster reduction rating system for disaster countermeasures promotion projects, as an incentive for corporate disaster reduction activities.

#### **Context & Constraints:**

The efforts have been recently started, and more supportive activities, especially for the medium and small sized enterprises, are expected.

### Core indicator 4

*Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.*

#### **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

#### **Description:**

Japan has City Planning Act which incorporates disaster risk reduction elements in the provisions. Especially it stipulates the measures to be taken for dense populated residential areas. Based on the Act and the related plans, disaster management bases with such functions as information management, operations coordination and logistics need to be developed and networks has been constructed. Additionally, subsidies are provided to local governments to promote qualitative and quantitative improvements of local disaster management bases.

Japan also has the Building Standard Act (enacted in 1950) and the Act on Promotion of Seismic Retrofitting of Buildings (enacted in 1995). It has been confirmed that buildings constructed under the revised Building Standard Act (known as the "New Seismic Design Method") enacted in 1981 have adequate earthquake resistance.

The Central Disaster Management Council drafted Urgent Countermeasures Guideline for Promoting the Earthquake-proofing of Houses and Buildings in 2005 which set a national target for lifting the rate of earthquake-proofed houses from the current 75 percent to 90 percent within 10 years. Further, the Act on Promotion of Seismic Retrofitting of Buildings were revised in January 2006, and defined the national goal for raising the rate of seismic resistant buildings from the current 75 percent to 90 percent within 10 years.

In consideration of the estimated significant damage in the congested urban areas when an earthquake occurs, the urban areas which have high risks of suffering from conflagration was designated as the

prioritized areas to improve the countermeasures within 10 years from 2001. Reinforcement of the system and active promotion of the project for the improvement has been pursued.

**Context & Constraints:**

Many buildings in Japan (roughly one-third of the total) have inadequate earthquake resistance because they had been built before the relevant standards were tightened in 1981; it has been pointed out that little progress is being made in improving the earthquake resistance of these aged buildings.

**Core indicator 5**

*Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

The recovery and rehabilitation of disaster-stricken areas focuses on providing support to help rebuild the normal livelihoods of the affected population as quickly and smoothly as possible, as well as on restoring public facilities giving consideration to mitigating future disasters so that affected communities can be made more resilient and have fundamental conditions for sustainable development. The Basic Act on Disaster Control Measures stipulates the recovery and rehabilitation activities should be paid great attention to prevent future disasters. In the case of the Great Hanshin-Awaji Earthquake in 1995, the Headquarters for Reconstruction of the Hanshin-Awaji Area (headed by the Prime Minister), followed by the Inter-Ministerial Committee for Reconstruction of the Hanshin-Awaji Area in 2000 secured integrated reconstruction measures with multi-sectoral collaboration. In the case of the Mt. Usu Eruption in 2000 and the Niigata-ken-Chuetsu Earthquake in 2004, inter-ministerial recovery and rehabilitation committees were established. As such, ministries and agencies work together on disaster recovery and rehabilitation, taking into account the opinions of those in the disaster-stricken area.

The Cabinet Office has organized review meetings and clarified the issues to be considered related to national recovery and reconstruction measures against possible Tokyo Inland Earthquakes.

**Context & Constraints:**

Due to involvement of private properties, in many cases, the recovery processes tend to be delayed.

**Core indicator 6**

*Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

The revised Priority Plan for Social Infrastructure Development was set forth in 2008 to promote prioritized, effective and efficient infrastructure improvement projects. One of the main tasks identified in the Plan is to make a disaster resilient national land. The Plan identifies the disaster risk reduction as one of the four important issues to be addressed and needs improvement of social infrastructure putting emphasis on consideration of impact of global warming, increase of disaster vulnerable persons, and declining of mutual help system in local community.

Environmental Impact Assessment Act, which was enacted in 1997, legislates the system for predictive assessment of the environmental impact by the large-scale public works.

Ministry of Land, Infrastructure, Transport and Tourism has conducted evaluation of the responsible public works from a broad perspective including disaster risk reduction when the projects are initiated, reevaluation during the projects, and post-project evaluation.

**Context & Constraints:**

N.A.

## Priority for action 5

*Strengthen disaster preparedness for effective response at all levels*

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### Core indicator 1

*Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.*

**Level of Progress achieved:**

5: Comprehensive achievement with sustained commitment and capacities at all levels

**Description:**

Based on the Basic Act on Disaster Control Measures and other relevant laws and acts stipulate the mechanisms for effective disaster responses. The national government collects disaster information at the Cabinet Information Collection Center 24 hours a day, and at the time of a large-scale disaster, the designated emergency response team comprised of the director-generals of the respective ministries and agencies gathers immediately at the Crisis Management Center in the Prime Minister's Office to grasp and analyze the disaster situation, and report to the Prime Minister. Inter-ministerial meetings at the ministerial or high-ranking senior official level are held to decide basic response policies if necessary. According to the level of damage, the government may establish a Major Disaster Management Headquarters (headed by the Minister of State for Disaster Management) or an Extreme Disaster Management Headquarters (headed by the Prime Minister). Additionally, a government investigation team headed by the Minister of State for Disaster Management may be dispatched, or an on-site disaster management headquarters may be established.

In the case of large-scale disasters that exceed the response capabilities of the affected local government, various wide-area support mechanisms are mobilized by the National Police Agency (Inter-prefectural Emergency Rescue Unit), Fire and Disaster Management Agency (Emergency Fire Rescue Team), and Japan Coast Guard. Furthermore, the Self-Defense Forces can be dispatched for emergency response activities upon request from the governor of the affected prefectural government. A wide-area medical transportation system for dispatching disaster medical assistance teams (DMAT) and ambulance parties for transporting seriously injured people to disaster management base hospitals outside of the disaster-stricken area is being developed.

**Context & Constraints:**

N.A.

### Core indicator 2

*Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.*

**Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

**Description:**

Based on the Basic Act on Disaster Control Measures, the Central Disaster Management Council prepares Basic Disaster Prevention Plan which is a basis for disaster reduction activities. Based on the Basic Disaster Prevention Plan, each designated government organization and designated public corporation develops Disaster Management Operation Plan. Similarly, based on the Basic Plan, each prefectural and municipal disaster management council draws up Local Disaster Prevention Plan subject to local circumstances. The Basic Disaster Prevention Plan states comprehensive and long-term disaster reduction issues such as disaster management related systems, disaster reduction projects, early and appropriate disaster recovery and rehabilitation, as well as scientific and technical research.

The Basic Act on Disaster Control Measures stipulates the obligations of disaster reduction drills. In order to promote various drills and exercises nationwide, the Central Disaster Management Council sets forth an annual "Comprehensive Disaster Reduction Drills Plan" which defines the basic principles for executing the drills and outlines the comprehensive disaster reduction drills carried out by the national government in cooperation with local governments and relevant organizations. In recent years, practical disaster reduction drill methods like role-playing simulation systems have been introduced, in which participants are not given any information beforehand and are required to make decisions and respond to the situation based upon the information provided after the drill starts.

For example, 1 September 2008, the disaster reduction drill envisioned the occurrence of Tonankai and Nankai Earthquakes was conducted in the official residence with participation of the all the Ministers. Comprehensive disaster reduction drills including government's role-playing simulation exercise, Tsunami disaster reduction drill, nuclear hazard risk reduction drill were also conducted. Local governments also have conducted the drills in line with the hazard situation and conditions in each area. For example, in 2007, such disaster reduction drills were conducted with participation of total 1.87 million people in 44 prefectures (among 47 prefectures).

In accord with the issue that the Local Disaster Prevention Plan has no concrete evacuation plan for volcanic eruption, a guideline for establishment of disaster risk management system for volcanic eruption was formulated in March 2008 and reported to the Central Disaster Management Council.

The Central Disaster Management Council has estimated the impact of up to 7 million evacuees and up to 6.5 million people stranded without a means of returning home in case of occurrence of Tokyo Inland Earthquake. The Council has discussed the countermeasures to deal with the foreseeable massive number of these people since 2006, and compiled the final report based on the result of discussion in October 2008.

**Context & Constraints:**

Some local governments have difficulty to make timely revision of the Local Disaster Prevention Plan due to lack of human or financial resources.

**Core indicator 3**

*Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.*

**Level of Progress achieved:**

5: Comprehensive achievement with sustained commitment and capacities at all levels

**Description:**

The following mechanisms are in place to take prompt and efficient disaster recovery and rehabilitation measures;

**(1) Disaster Recovery Project**

The recovery of damaged public infrastructure facilities, educational facilities, welfare facilities and agricultural, forestry and fishery facilities is either conducted directly by the national government or put into practice by the local government with subsidies from the national government.

## (2) Disaster Relief Loans

Persons engaged in the agriculture, forestry or fishery industries, small and medium enterprises and low-income people who incurred damage are eligible for a variety of low-interest loans with rather generous conditions as compared to normal ones.

## (3) Disaster Compensation and Insurance

Affected persons engaged in the agriculture, forestry or fishery business can obtain compensation for disaster losses. Earthquake insurance system has been established by the national government.

## (4) Tax Reduction or Exemption

For affected persons, measures are taken for the reduction, exemption and postponed collection of income and residential taxes.

## (5) Tax Allocation to Local Governments and Local Bonds

For affected local governments, measures such as delivery of special tax allocations and permission to issue local bonds are taken.

## (6) Designation of Extremely Severe Disaster

When a disaster causes extremely severe damage, it is designated an "extremely severe disaster." Various special measures are to be taken for disaster recovery projects in the case.

## (7) Assistance for the Rehabilitation Plan

Assistance is provided, when necessary, for local government rehabilitation plans, which should be quickly and accurately formulated and implemented.

## (8) Act on Support for Reconstructing Livelihood of Disaster Victims

Assistance is provided for victims to support their self supporting efforts through disaster condolence money, disaster impediment sympathy money, money for support of livelihood recovery of disaster victims and loans such as disaster relief funds and livelihood welfare funds. Recently in November 2007, the Act was amended to hand over the support fund by lump sum payment according to the condition of damage or the way of reconstruction of houses, instead of providing the fund by cost reimbursement.

To promote earthquake insurance protection, a system to take a tax deduction for earthquake insurance premiums was introduced in 2006. Further, the limitation of the payment of premium to the damage caused by an earthquake was increased from 5 trillion yen to 5.55 trillion yen in April 2008.

### **Context & Constraints:**

N.A.

### **Core indicator 4**

*Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews*

### **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

### **Description:**

The Cabinet Office has developed databases on the lessons learned through the experiences of the responses of the large-scale disasters. They include analysis of the incidents, responses, issues at all phases of the disasters based on the information from various sources including official reports, general publications, magazines and papers. They are compiled for the purpose of being utilized in the future hazard events and disasters.

Further, the Central Disaster Management Council has been collecting the lessons learned through the past disasters since 17th century in order to hand down to the next generation. During the third period of the review (2007 – 2008), the information of Great Kanto Earthquake in 1923, Hietsu Earthquake in 1858, Chile Earthquake Tsunami in 1960 and Typhoon Catherine in 1947 was collected and examined.

**Context & Constraints:**

Further elaboration would be expected to the effective utilization of the information.

## Drivers of Progress

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**a) Multi-hazard integrated approach to disaster risk reduction and development****Levels of Reliance:**

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

**Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:**

Yes

**If yes, are these being applied to development planning/ informing policy?:**

Yes

**Description (Please provide evidence of where, how and who):**

National Research Institute for Earth Science and Disaster Prevention has been currently developing disaster information sharing system which will be combined with multi-hazard risk assessment. Further, the National Land Formation Planning Act enacted in 2005 places emphasis on creation of safe and secure nation.

**b) Gender perspectives on risk reduction and recovery adopted and institutionalized****Levels of Reliance:**

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

**Description (Please provide evidence of where, how and who):**

Some local governments incorporate the view of the gender in their Local Disaster Prevention Plan. Also, in some local governments, they promote women's participation for disaster risk reduction activities or works. However the participation of the women in the Disaster Management Council at local government level is still limited.

**c) Capacities for risk reduction and recovery identified and strengthened****Levels of Reliance:**

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

**Description (Please provide evidence of where, how and who):**

Under the Basic Act on Disaster Control Measures and the relevant ordinances, each local government has been obliged to implement risk reduction activities. Most of the local governments in the areas vulnerable to disasters have the departments to deal with disaster risk management. In addition, Disaster Reduction and Human Renovation Institution (DRI) regularly provides training program specialized for local government officials in charge of disaster management.

Formation of community-based voluntary disaster reduction organizations, voluntary firefighting teams and flood-fighting teams has been promoted by local governments and others with provision of training program or workshops to learn disaster risk management.

Further, to promote a nationwide movement where individuals, families, communities, corporations and

other various groups and entities participate in continuous activities and investments for mitigating disaster damage, in 2006 the Central Disaster Management Council published the “Basic Framework for Promoting a Nationwide Movement for Disaster Reduction - Actions with Added Value to Security and Safety.”

#### **d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities**

##### **Levels of Reliance:**

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

##### **Description (Please provide evidence of where, how and who):**

As mentioned in the previous section, change in social structure, living environment and lifestyles on a nationwide scale in recent years have led to increase of numbers of elderly people who are living alone as well as sparsely-settled areas mainly consist of aging population, which make difficult mutual support among residents including setting up community organizations. Based on the “Guidelines for Evacuation Support of People Requiring Assistance During a Disaster” in 2005 (revised in 2006), measures to provide necessary assistance to those such as the elderly and physically impaired at the time of a disaster need to be reinforced.

#### **e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels**

##### **Levels of Reliance:**

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

##### **Description (Please provide evidence of where, how and who):**

Recognition of the use of localized knowledge and information, many of local governments recently invite local residents in the process of development of Local Disaster Management Plan or/and hazard maps. The national government has designated January 17th of each year as Disaster Reduction and Volunteer Day and January 15th to 21st of each year as Disaster Reduction and Volunteer Week. The Cabinet Office creates opportunities to share information among volunteer groups and relevant entities and provides useful information to improve the environment for disaster reduction volunteer activities. In order to promote corporate disaster reduction activities, it is necessary for companies that are active in this field to be properly evaluated by the market and the community where they are located. The Central Disaster Management Council also makes efforts to motivate corporate intentions to the activities.

#### **f) Contextual Drivers of Progress**

##### **Levels of Reliance:**

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

##### **Description (Please provide evidence of where, how and who):**

N.A.

## **Future outlook**

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### **Area 1**

*The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.*

**Overall Challenges:**

Decrease in disaster risk reduction related budget

**Future Outlook Statement:**

One of the strategic goals in the National Spatial Strategies identified in the Act and the National Strategies are to design disaster resilience nation to ensure safe and secure life including promotion of comprehensive disaster risk reduction measures.

**Area 2**

*The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.*

**Overall Challenges:**

Lack of awareness on disaster reduction in younger generation

**Future Outlook Statement:**

Disaster risk reduction can be achieved only thorough the collaborative measures by all the different actors, from citizens and communities to public authorities. Citizens' and communities' understanding cannot be achieved in a day, and tireless efforts are needed to gradually promote their engagement and actions toward concrete preventive measures

**Area 3**

*The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.*

**Overall Challenges:**

Decrease in disaster risk reduction related budget

**Future Outlook Statement:**

The recovery and rehabilitation of disaster- stricken areas focuses on providing support to help rebuild the normal livelihoods of the affected population as quickly and smoothly as possible, as well as on restoring public facilities giving consideration to mitigating future disasters so that affected communities can be made more resilient and have fundamental conditions for sustainable development.